

National Transportation Safety Board  
Washington, DC

Living Classrooms Foundation Comments to  
Safety Board Factual Reports  
October 3, 2005

Small Passenger Vessel M/V *Lady D* Capsizing  
Baltimore Northwest Harbor, Baltimore, Maryland  
DCA-04-MM-015

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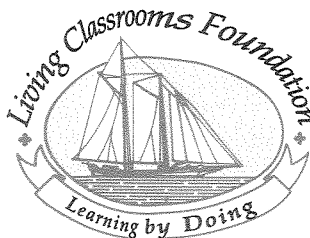
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Celebrating 20  
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October 3, 2005

## VIA FEDERAL EXPRESS/E-MAIL

Tom Roth-Roffy, P.E.  
National Transportation Safety Board  
490 L'Enfant Plaza East S.W.  
Washington, DC 20594-2000

Re: LADY D

Dear Mr. Roth-Roffy:

Following below are comments and/or corrections to the draft NTSB documents that you submitted:

1. I understand the Operations and Human Group Factual Report was written to describe the Living Classrooms Entities at the time of the accident. As you know, Seaport Taxi is no longer in operation.

2. On page 41 of the Operators and Human Group Factual Report and on page 8 of the Engineering and Stability Report, you state that Seaport Taxi does not have a "formal preventive maintenance program." You then go on to outline an actual preventive maintenance program. As such, the above statement is not entirely accurate. We suggest striking the above language on each of the two reports and inserting the following:

According to the Director of Seaport Taxi, the operating company of the LADY D had a preventive maintenance program that included a feedback system that is described in more detail below.

3. There are some typographical and/or minor factual mistakes in the Operations and Human Performances Group Factual Report and the Engineering and Stability Report. I have simply written on the pages where the mistakes are located and these are attached hereto.

Very truly yours,

James Piper Bond  
President and CEO



**National Transportation Safety Board**  
**Operations and Human Performance Groups Factual Report**

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March 28, 2005

**Accident Information**

Accident No.: DCA04MM015  
Description: Capsize of Seaport Taxi *Lady D*.  
Location: Baltimore Inner Harbor near Fort McHenry National Monument.  
Date: March 6, 2004  
Time: ~1600 hrs Eastern Standard Time

**Group Representatives**

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Mr. Andy Murray



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## SUMMARY

The Seaport Water Taxi, *Lady D*, or commonly referred to as the No.1 Boat by the operators, arrived at the Baltimore City Fire Department Dock at Fort Mc Henry National Monument and Historic Shrine at approximately 15:45. The *Lady D* was on a continuous back and forth schedule between Fort Mc Henry and Fells Point. The Captain notified the Fort Coordinator, who was an employee of Seaport Taxi, that he was approaching and to prepare the passengers. 23 Passengers were sent to the Fire Boat Dock and boarded the *Lady D*. Three of the passengers were children.

The *Lady D* is a pontoon boat with two fore-and-aft passenger benches. The operator console was forward on the starboard side. The vessel was loaded over the bow through a door into the enclosed cabin area, which had sliding windows on each side. The Mate normally stood to the port of the Master and slightly behind. Life preservers were stowed below the benches.

Shortly before boarding, passengers noted the darkening sky. The dock coordinator and passengers told investigators that as the boat left the Fort, a heavy rain began.

(both licensed  
captains)

The boat departed the Fire Boat dock with a Master, a Mate and 23 passengers, and headed for Fells Point. Shortly after its departure, Seaport Taxi's Senior Captain on



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1 On March 6<sup>th</sup>, 2004, there was a flood tide with water levels one foot above Mean  
2 Lower Low water.<sup>5</sup> (Detailed weather conditions can be found in the Meteorology factual  
3 report) A rapidly moving weather system moved through the area in the afternoon, with  
4 high winds, rain and lightning activity. A National Weather Service "special marine  
5 warning" was issued at 1605 for that afternoon, just minutes after the Lady D capsized.  
6 But passengers reported seeing dark clouds before boarding the boat at Fort McHenry  
7 and it began raining heavily as the boat left the dock. The Captain indicated that the wind  
8 was increasing as he backed away from the Fort.

9 Prior to this ownership, another water taxi company  
operated the LADY D on this route at times.

10 The Lady D has been going to Fort McHenry since NHS has owned Seaport Taxi.  
11 For 2 years prior to the accident, the run to Fort McHenry was the Lady D's primary  
12 route. The Seaport Taxi operation is a loop, and the boats make the loop depending upon  
13 the passenger traffic and how many stops the boats have. Up to 80 percent of the  
14 passenger traffic begins at Harbor Place in Baltimore's Inner Harbor. Rotating the  
15 smaller boats in rapid succession provides better customer flow according to company  
16 officials.

17  
18 The Lady D was using a dock at Fort McHenry, which belonged to the City of  
19 Baltimore after a hurricane destroyed their regular berth near the BCFD fireboat dock at  
20 Fort McHenry. Passengers would be shuttled about the harbor on different Seaport Taxis  
21 using one daily fare. Once at the Fort, a Fort Coordinator would keep a count of the

<sup>5</sup> NOAA/NOS PORTS© Historical Data Retrieval, 3/6/2004



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Passport Voyages of Discovery  
Ride the Ducks  
Fells Point Maritime Museum  
Heritage Walk

USS <i>Constellation</i> Museum	Star-Spangled Banner Flag House
Seaport Taxi	Civil War Museum (Maryland Historical Society)
	Sail Baltimore/Visiting Ships Program
*NHS manages the Patriots of Fort McHenry, a friends group that helps the fort with educational activities and that funds miscellaneous activities such as fireworks displays not paid for by the Federal government.	

Figure X. National Historic Seaport of Baltimore Assets and Affiliates

According to a company spokesman, the Living Classrooms Foundation needed a way to <sup>transport people</sup> ~~travel~~ <sup>above</sup> between all of the ~~National Historic Seaport~~ sites and so it purchased <sup>and provide additional job training opportunities</sup> Seaport Taxi from the company's owner in 2000. Seaport Taxi is owned by the National Historic Seaport of Baltimore or (NHS).

Seaport Taxi was purchased in March 2000 to unify all of the historic sites that are spread around the harbor. There used to be a service that ran from Harbor Place to Fort McHenry, but that group went out of business about the time that NHS was formed. The City owns the dock at Fort McHenry where Seaport Taxi lands. They lease the dock for \$1/year. As part of the lease agreement, Seaport Taxi must maintain the dock. However, when the Fort McHenry pier was damaged by a hurricane, NHS obtained permission from the Fire Chief to land at the fireboat base. Living Classrooms has a renewable agreement of access with Fort McHenry, allowing people to enter the fort's gate. The fee is \$100/year. In 2003, Seaport Taxi transported 200,000 paying customers. (A round way trip counts as two trips.) There is another water taxi operator in Baltimore.



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USS Constellation, Baltimore Harbor-NTSB photo

The NHS Director stated that Seaport Taxi fit into the mission of training <sup>youth</sup> kids during the summer <sup>season</sup>. The Taxi system <sup>also</sup> transports students to classes taking place at other Living Classroom Foundation sites. When NHS purchased the water taxi in March 2000, Baltimore City and the taxi company had already negotiated a 5-year wharfage agreement identifying areas where the water taxis could land. At the time of this accident, the landing rights cost NHS \$6,000/month, and the agreement was due to expire at the end of March 2004. According to the NHS director, Baltimore City's Department of Public



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1 • Must keep the boats in good working order.

2 • Charters for children (three programs):

3 *The Living Classrooms led*

4 ~~The Baltimore County School System has~~ an active program called "Renaissance"  
5 *ed 5 or 6 weeks. The Living Classrooms also had* ~~The State has~~ two smaller cooperative programs: SuperKids,  
6 lasting 2 weeks, and Bay Buddies, which is for severely handicapped, wheelchair-bound  
7 children. All of the Seaport Taxi vessels are front loading and, therefore, ADA  
8 accessible. The program manager on the education side of the foundation works with  
9 Seaport Taxi to line up charters for school children.

10  
11 The Seaport Taxi operations are run out of a small building near the waterfront  
12 of in the Eastern Inner Harbor, near the Living Classrooms facility. The Director, Fleet  
13 Captain and office manager's desk and computer are located in an area near a small boat  
14 ramp and marina docks. The National Historic Seaport of Baltimore has <sup>an</sup> offices at the old  
15 lighthouse in the Inner Harbor.



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1 background. He said that Living Classrooms hired him for his strategic planning<sup>management</sup> and  
2 financial management skills, with the intent of hiring other people to manage the day-to-  
3 day operations. of the NHS entities.

4  
5 As NHS director, he oversees seven operating entities: Seaport Taxi, Baltimore  
6 Maritime, the U.S.S. *Constellation*, Paddle Boats, Patriots of Fort McHenry, the Baltimore  
7 Waterfront Promenade, and National Historic Seaport Administration, the administrative  
8 unit, which captures overhead and staff costs. The NHS director receives operational  
9 updates and supervises the Director of Seaport Taxi.

10  
11 The Seaport Taxi director indicated to Safety Board investigators that he had been  
12 interested in boats and motors since he was child. He said that when he was about 10  
13 years old, he learned about outboard motors reading the service manuals. He  
14 subsequently took Peterbilt Motors Company and General Motors Corporation training  
15 classes that dealt with vessel machinery. After graduating from Hofstra University with a  
16 major in fine arts and minor in business management, he worked for the R.J. Reynolds  
17 Tobacco Company for almost 15 years, chiefly as a sales representative. In 1986, while  
18 with R.J. Reynolds, he qualified for his first Coast Guard master's license, which  
19 authorized him to operate 25-ton passenger vessels. He then worked part time operating  
20 six-passenger charter boats in New York as a means of additional income.



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- Excessive absenteeism or tardiness.
- Having possession of or being under the influence of drugs prohibited by law while on the Foundation's premises.
- Destruction of Foundation property, threatened or actual violence, or carrying a weapon.
- Falsification of Foundation records.
- Violation of safety, fire prevention, health, or security rules.

According to the Director of Seaport Taxi, the operating company of the LADY D had a preventive maintenance program that included a feedback system that is described in more detail below.

#### Maintenance Program

~~According to the company director, Seaport Taxi does not have a formal preventive maintenance program requiring personnel to do prescheduled daily, weekly, monthly, and/or annual checks and upkeep of the fleet's vessels and their components.~~

He stated that the pontoon vessels themselves are "very simple;" and the operating equipment includes a self-lubricating hydraulic navigation system and either a two-cylinder or a four-cylinder engine. Most routine maintenance, therefore, is limited to checking for leaks, replacing seals, adding oil, greasing engine parts, and changing spark plugs, tasks that are affected, in large part, by the number of hours that a vessel is in use<sup>7</sup>.

The Seaport Taxi director said that the demands of the taxi service operation had demonstrated that maintenance needed to be "an ongoing process." He said that while the vessels are in use, their captains are shifting gears anywhere from 500 to 800 times a day

<sup>7</sup> Maintenance program covered in Engineering Factual



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1 was overseeing preparations for the vessel's annual topside inspection by the Coast Guard,  
2 and the mate was counting and checking the condition of the preservers, testing the water  
3 lights, and going through the boat making sure everything was the way it should be. The  
4 director indicated that the last time he operated the *Lady D* was February 25, when he took it  
5 to attend a meeting at the *Constellation*. He said, "As far as the operational systems, [the  
6 vessel] seemed fine. Radio was working." The fleet captain said that he operated the *Lady D*  
7 less than a week before the accident and noted no problems.

## 9 COMPETITION IN THE HARBOR

11 The Ed Kane water taxi service operates a fleet of 12 vessels. They do not have  
12 ~~pontoon boats~~. The Safety Board interviewed the manager of Seaport Taxi's competitor.  
13 The boats operate in a similar harbor shuttle fashion between various inner harbor  
14 destinations. They do not have an agreement to run passengers to Fort McHenry.

a few  
catamarans



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## Group Chairman's Factual Report

### Engineering and Stability

M/V Lady D Capsizing

Accident Number: DCA-04-MM-015

April 01, 2005

e) Outfitting. The vessel had two longitudinal benches located within the deckhouse. The benches were bolted to the diamond tread deck at the outboard sides of the deckhouse. Each of the benches was constructed of 1-1/4 inch aluminum square tubing and wooden planks. Each bench had two parallel horizontal surfaces created by the wooden planks: the top planks were used as a passenger seating surface and the lower plank was a life jacket storage shelf. Also located within the deckhouse was the operator station, which consisted of a console and swiveling padded chair. The console was fitted with the steering wheel, throttle and clutch controls, a marine VHF-FM radio, and an electrical switch and fuse panel.

f) Propulsion and steering system. The vessel was powered by a 90-HP, 4-stroke, Honda™ outboard engine. The engine throttle and clutch were controlled by independent levers mounted on the control console. Wire cables connected the throttle and clutch control levers to the engine. The vessel was fitted with two gasoline fuel tanks mounted at the stern of the vessel, on directly above each pontoon. The starboard tank was slightly larger than the port tank, and both tanks had a combined capacity of about 40 gallons. When the vessel was originally put into service, it had only a single fuel tank, and later the second fuel tank was fitted.

The steering system was a SeaStar™ hydraulic type system. The steering system consisted of an axial piston pump actuated by the helm (steering wheel) and an actuating cylinder connected to the engine. The pump and cylinder were connected to each other by hydraulic hose.

g) Electrical and communications system. The vessel was fitted with a 12-volt DC electrical system for engine starting, lighting, and radio power. The system had one battery fitted at the aft area of the deck, between the two fuel tanks. The electrical power was distributed to various loads through a switch and fuse panel mounted on the top surface of the operator's console. A battery disconnect switch was fitted near the battery. The vessel was fitted with a Standard Horizon Eclipse +™ VHF-FM marine radio. According to manufacturer's product literature, the radio was fitted with a NOAA weather alert feature<sup>3</sup>. The radio was mounted on the top surface of the operator's console.

3) Company maintenance program According to the Director of Seaport Taxi, the operating company of the LADY D had a preventive maintenance program that included a feedback system that is described in more detail below.

a) ~~According to the Director of Seaport Taxi, the operating company of the Lady D, the company did not have a documented formal preventive maintenance program.~~ In an interview, he described the program as "a feedback system ... we look at the vessels .. they are very simple ... very few systems on the vessels." As part of the feedback system, the vessel masters are required to maintain a Captain's Shift Log on which they provide information for such line items as the time of day they began operating a particular vessel, how long they were on duty, and how much gas or engine oil they added during their shift. The log form also provides space where the masters can write comments about conditions or problems that they encounter during their shift such as vessel equipment that is damaged, missing, and/or not operating efficiently. At the end of their shifts, the masters submit the logs to the Seaport Taxi office. The office manager then reads the shift logs and provides a copy of any report of damage or of malfunctioning equipment to the fleet captain for review and/or action.

b) The director further described the vessel maintenance program as being "proactive." He said the captains are required to check all systems, lights, horns, and steering each time they are assigned to a vessel and to make sure everything is operating properly and to their satisfaction before they put the boat in service. The director stated that as licensed masters, he believed the captains "should have a good handle on what is right and proper for leaving the dock. The Seaport Taxi director stated that he believed the company's proactive method of working on the vessels ensures the safety of equipment and operations. He told Safety Board investigators, "My approach is let's not wait until the thing is a total wreck and have to fix ten things. Let's work on them as they occur. I find that you have less stress level built up, and the boats are maintained at a higher state."

<sup>3</sup> According to the company website, the ECLIPSE+ features 10 NOAA weather channels including weather alert allowing ECLIPSE+ to intercept frequency encoded regional Emergency Weather alerts.

<sup>4</sup> Information about the company maintenance program was obtained primarily from the director of Seaport Taxi in an interview conducted on March 7 and 8, 2004.